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March 10, 2000

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

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Ms. Magalie Roman Salas
Secretary, Federal Communication Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Ex Parte Presentation of Covad Communications Company in CC Docket No. 00-4, *Application by SBC Communications Inc., et. Al. For Provision of In-Region, InterLATA Services in Texas*

Dear Ms. Salas,

At the request of Jessica Rosenworcel, FCC Common Carrier Bureau staff, enclosed is certain information regarding the Marconi DISC*S digital loop carrier system. Covad discussed this issue in its March 1, 2000 *ex parte* letter, and FCC staff has requested Covad to provide further documentation.

Four documents are enclosed. The first document contains excerpts of testimony by Covad engineer David Rosenstein, dated December 17, 1999, in a Georgia proceeding involving BellSouth. In this testimony, Mr. Rosenstein describes how Covad and U S WEST technicians identified the issue (pp. 84-85).

It is important to understand that the problem lies with the Marconi DISC*S system, in that it "makes certain slots not compliant with [Bellcore Technical Reference] 393." (Rosenstein Testimony, p. 85). Mr. Rosenstein explains that TR00393 specifies "what you should be seeing on both ends" of the circuit, and that certain slots of the Marconi system do not permit the ISDN physical layer from being provided through those slots (*id.* at 86). Mr. Rosenstein points out that one slot on the DISC*S system "was never compliant", and even prevents the provision of ILEC ISDN services (*id.* at 96). In the end, Mr. Rosenstein stated that once the flaw was discovered with U S WEST in 1999, "the solution happened within a matter of a week" (*id.*)

SWBT seems to be trying to justify its clear lack of performance on BRI ISDN loops by implying that CLECs providing IDSL service are providing a non-standard service that is more complex to provide than retail ISDN service. Bellcore TR 000393, the second attachment to this letter, refutes this argument. This document is the technical reference for IDSN BRI services, and *clearly* indicates that ISDN BRI is a "Digital Subscriber Line" service. Section 2.1 of TR000393 clearly states, "[a] DSL provides high quality transmission capability for a single ISDN Basic Access customer over a non-loaded, two-wire metallic cable pair." As Mr. Rosenstein states in his Georgia testimony, "ISDN is DSL . . . DSL is a way to encode digital signals onto a subscriber line typically

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used for voice services. That's all that it means. So ISDN is xDSL, is IDSL." (Rosenstein Testimony at 89).

The third attachment to this letter is an e-mail from Mr. Bill Jernigan of Marconi dated August 17, 1999, describing the results of interoperability testing between the Marconi DISC*S system and Covad DSL equipment. In this e-mail, Mr. Jernigan states that certain slots on the DISC*S system does not work for IDSL and proposes a simple "administrative" solution to the issue—tagging these slots (as described by Covad in its March 1 *ex parte*). This is essentially the same solution that ILECs currently use to prevent retail ISDN from being used over the one slot in the Marconi system that does not support ISDN service.

It is important for the Commission to remember that SWBT, in its interconnection agreements, is obligated to provide a 2-Wire Digital Loop that "supports Basic Rate ISDN (BRI) digital exchange services."[1] As Mr. Rosenstein's testimony makes clear, the Marconi DISC*S system in some instances prevents a transmission channel conforming to Bellcore TR000393 for BRI services from being provided. The fact that IDSL technology picks up a bug in equipment SWBT chose to deploy that SWBT's retail ISDN technology does not always detect simply does *not* excuse SWBT from its failure to provide loops to data CLECs that do not meet the relevant Bellcore technical standard. Moreover, a relatively simple solution to this problem is available—not assigning CLEC IDSL loops to particular slots, as ILECs do with the one slot in the DISC*S system that does not support their IDSN service.

Finally, even if the Marconi system is responsible for delay in providing BRI ISDN loops to CLECs, without information on the scope of SWBT's deployment of this system in Texas, this flaw cannot be used to justify *all* of SWBT's failures to provide these loops. Covad will continue to examine this issue and provide Commission staff further information.

Two copies of this Notice are being submitted to the Secretary in accordance with Section 1.206(a)(2) of the Commission's rules.

Sincerely,

Thomas M. Koutsky

cc: Jessica Rosenworcel
Audrey Wright, Common Carrier Bureau
Bill Dever, Common Carrier Bureau
Katherine Farroba, Texas PUC (via FedEx)
Luin Fitch, DOJ
ITS

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[1] Covad/SWBT Interconnection Agreement, xDSL Attachment, attached to the Goodpastor Reply Affidavit, at § 4.1.2.

BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

In the Matter of:	:	
DIECA COMMUNICATIONS d/b/a COVAD COMMUNICATIONS COMPANY'S COMPLAINT AGAINST BELLSOUTH FOR BREACH OF CONTRACT	:	Docket No. 11650-U

Hearing Room
47 Trinity Street
Atlanta, Georgia

Friday, December 17, 1999

The above-entitled matter came on for preliminary hearing pursuant to Notice at 10:00 a.m.

BEFORE:

LEON BOWLES, Hearing Officer

* * *

BY MS. BOONE:

Q Now I want to talk a little bit about the DISC*S situation. This is BellSouth Exhibit 2.

(A document was proffered to the witness.)

A Yes, I have it.

Q Okay. Are you familiar with this e-mail?

A Intimately.

Q Why don't you explain to us the background of this situation.

A Certainly. In the U.S. West region, we were having problems bringing up IDSL service and we spent some time looking at the problems and we realized that they were specific to this DISC*S digital loop carrier system.

Q So that's one specific kind of DLC.

A One specific manufacturer, one specific type of loop carrier system.

Q And other kinds would be like SLIC or Lite Span?

A Yeah, there are a bunch of vendors that build them, Lite Span and SLIC are two common ones.

Q Okay. So of all the DLC, of that BellSouth could have employed, there are all these different kinds and the subset that we're now talking about is the DISC*S brand.

A The background on this -- again, we're talking specifically about a DISC*S problem that showed up with U.S. West.

Q Okay.

A We worked it with our technicians and we worked with the U.S. West technicians to narrow it down to DISC*S. At that point, I directly contacted the people at what that time was RELTEC changing over to Marconi. RELTEC was originally the manufacturer of DISC*S, Marconi purchased them and so now they're Marconi. And I worked with this Bill Jernigan. I personally was the person who went to Texas to do this testing. And what we found out, you know, to make a long -- a very long story short is that there's a bug in DISC*S that makes certain slots not compliant with 393. It's a bug that ISDN service doesn't necessarily exercise, but that doesn't make it acceptable for -- it doesn't work with our service and it doesn't -- it's not compliant with 393, which is the standard that we're working towards.

Q Okay, so what we're talking about is four-line slots, right?

A Uh-huh.

Q That's where this bug exists.

A Four-line slots in each digroup of 24-line slots and four of each of those digroups.

Q And it's this system that does not comply with 393?

A Correct. Now let me put just a tiny bit of -- 393

does not specifically talk to the issue of loop carrier systems, 393 only deals with the physical specification of the transmitter -- of what the transmitter is putting onto the line and what the receiver is taking off the line. If there is a UDLC in the middle -- UDLC meaning a loop carrier system that has a copper interface on both ends, 393 does not specifically address that. However, 393 does address what you should be seeing on both ends.

Q Okay.

A In that way, the DISC*S does not comply with 393.

Q Okay, and it's a bug in that system.

A It is a bug that is in that system, correct.

Q And it's not a bug that an ISDN service that BellSouth may offer would necessarily pick up on.

A The ISDN service that is typically offered does not exercise that bug and that's why it's existed in DISC*S for so long.

Q Okay. But our IDSL does pick it up.

A Correct.

Q Now I'm sure you went through a lot to get to there. What's the solution for this?

A We were working with U.S. West and we had to work out a solution, we had to work out a way to go to another slot.

Q So it's about moving the card from one slot to

another slot?

A Correct. There's no provisioning, there's no, you know, make it work setting unfortunately on DISC*S. The only way to solve the problem was to go to another slot. But we were working together on it and we got to solve the problem.

Q And that's a simple solution.

A Seems pretty simple.

Q How many slots are there typically on a DISC*S system?

A The DISC*S system uses 12 physical slot and each physical slot has two what's called time slots, a BRI channel, an ISDN-capable channel uses three time slots, which is 1.5 physical slots. It gets pretty sloppy, but there are 12 physical slots, just working off of physical slots.

Q How many -- given this bug, how many of the slots could we use for our service?

A Well, of the 12 physical slots, one of the physical slots can't support ISDN at all for anyone's service. It doesn't support the ISDN-capable card. So there's I guess seven slots left that can support our service.

Q And that's one line of eight and there are three of those usually?

A Yes.

Q So 20 out of 24 slots can support our service?

A Twenty-one, yeah.

Q Twenty-one, sorry, my math. We heard some things about the U.S. West definitions. I just want you to tell us, is an ISDN line -- I mean ISDN -- it can work over an xDSL loop, correct? What's all that mean?

A There was some discussion earlier on about is IDSL ISDN or is IDSL xDSL. If I could just give one quick sentence out of the 393 standard, I think it might help clear it up a little bit. This is in Bellcore 393 and I'm just going to read this very beginning part of the first sentence of page 5, section 2.1. It says -- this is the standard for ISDN physical layer and it says "A DSL provides high quality transmission capability for a single ISDN basic access customer over a non-loaded" -- it gets technical after that and if it's okay with you guys, I won't go further.

Q That's fine.

MR. McCALLUM: I need to know what page.

MS. BOONE: I'm sorry --

THE WITNESS: I'm sorry, page 5, it's 2.1. And I apologize if I'm speaking out of turn by doing this, I'm the engineer guy, so I don't follow all the rules as strictly.

BY MS. BOONE:

Q What line were you referring to again, so I can point Mr. --

A The very first sentence of that page.

Q Now can you explain for those of us that are not technical what that means?

A ISDN -- what they're saying here is ISDN is DSL.

Q Okay.

A And IDSL is DSL because we just said that ISDN is IDSL. You know, it's just games with English, they're all different descriptions for the same -- at the basic layer -- for the same thing.

Q Okay.

A So DSL is a way to encode digital signals onto a subscriber line typically used for voice services. That's all that it means. So ISDN is xDSL, is IDSL.

Q Okay.

MS. BOONE: Mr Bowles, did you have more questions for Mr. Rosenstein?

HEARING OFFICER BOWLES: I just wanted to say these are the technical standards, does anybody want to put this in the record?

MS. BOONE: I will move them into the record. I don't -- I didn't make adequate copies, but I will get that done and get that to the court reporter and Mr. McCallum can have this copy.

And we also need to move into evidence COVAD Exhibits 10 and 11 -- sorry, the standard 393 will be COVAD Exhibit 10 and then the BellSouth technical reference we'll also put in there and that will be COVAD Exhibit 11.

(The documents referred to were marked for identification as COVAD Exhibits 10 and 11 and received in evidence.)

MS. BOONE: We would tender the witness.

CROSS EXAMINATION

BY MR. MCCALLUM:

Q First of all, so I don't butcher your name, is it Rosenstein?

A Rosenstein, yes.

Q Rosenstein, okay. Mr. Rosenstein, my name is Fred McCallum and I represent BellSouth. I'm just going to ask you a few questions because I don't have technical background at all and we would rapidly get into a mess if I got too far into it with you.

But if I understand the drawing that you put on the board, you've got a number of boxes there.

A Uh-huh.

Q Three layers of boxes, and if I wrote it down correctly, I think you said that when you take all three layers of those boxes, that that is what somebody gets when

THE WITNESS: I'll find it.

MR. McCALLUM: I assumed he had a page reference for what he said.

THE WITNESS: You assume too much. Hold on one second -- here we are. So it's page 15, it's 8.3.1, interfaces -- yes, correct, it refers to ANSI T1 601-1992.

Q Okay. Now are you familiar -- you're familiar with the Marconi issue?

A Yes, sir.

Q Are you familiar with the e-mail that was distributed earlier?

A Yes, I am.

Q So you are familiar with that e-mail?

A Yes.

Q And you've seen the e-mail before? It's e-mail that came to somebody -- did it come to you in COVAD?

A I specifically requested this e-mail originally from Bill Jernigan to clear up the issue just so we had some documentation as a result of our testing. So yeah, I am familiar with it.

Q Okay, I want to make sure, is it your testimony that if BellSouth provides an ISDN-compatible loop that is compliant with the ANSI 601 standard, would that satisfy COVAD?

A Yes, it would satisfy me.

Q Would you agree with me that -- have you got that e-mail up there?

A I do, yes. BellSouth Exhibit 2?

Q Yes, sir.

A Yes.

Q When it says down in the middle that these channels are not restricted for normal ISDN applications which do not require the additional ISDN frame relationship of the application tested, does that mean basically there is no restriction on any of those channels for normal ISDN service?

A It means that although there's a bug in those channels, the way that standard ISDN is provisioned does not exercise that bug and therefore, there is no restriction for ISDN in those slots, correct.

Q So standardized ISDN service will work in all the slots on the Marconi DISC*S DLC, correct?

A As it was at the time and is currently provisioned by U.S. West, yes.

Q IDSL service will not work on all of the slots in a Marconi, DLC, is that correct?

A IDSL service will work on all of the slots that are compliant with ANSI T1 601, it will not work in the ones that are not compliant.

Q So is that a yes, it did not -- I didn't ask the

question in terms of standards, just as a matter of fact, it will not work in all the slots in a Marconi DLC, is that correct?

A That's correct.

Q So to make that work in those -- is there a way to make that work in those slots?

A No, there's not.

Q So you said that -- I believe you said in response to that, that you worked out a pretty simple solution with U.S. West to go to another slot.

A Yeah, and I can't speak to --

Q Can you describe that?

A -- exactly how the arrangement was made. After the engineering was solved, it went on to the ILEC people and it was arranged -- the rest of it was handled at that level. But that was essentially the solution, was because these slots are not in compliance with standard, they had to find a way to move to another slot.

Q Well, what do you know about that process, about that solution? Tell us all you do know about that solution.

A Unfortunately that's pretty much all I know, is that they had to find a way to move to another slot for those cases. What I do know is that the DISC*S by definition has one slot of each of the digroups that was never compliant, so they had to extend that system to track

that these additional slots were not compliant.

Q So you described it as a simple system, but the fact is, you know very little about what the actual simple solution -- I'm sorry -- what you know is just the technical piece of what had to be done to fix it, correct?

A That's correct.

Q You don't know anything about what happened actually trying to do the M&Ps and do whatever work was necessary to actually put that in place in the ILEC, correct?

A All I do know about that is that after the technical parts were settled, the solution happened within a matter of a week. So it may have been very complicated and nobody slept for a week, but it was pretty much straightened out after that.

Q This e-mail doesn't -- Marconi doesn't, in this e-mail, say that they're not meeting the industry standard, do they?

A No, they don't.

Q Did you ever ask them to write you a memo or report that confirmed that his system was non-compliant with the national standard?

A Again, the standard 393 does not address digital loop carrier systems. So I would not put him on the spot for him to extend what he is or is not meeting in the

system, as it may affect a future interconnect agreement or something else. That's not what I do.

Q Do you know of anything and can you point us to where -- I guess what you're saying is there's nowhere you could point us to in TR 393 where there'd be a provision that you could point to that says this is what the Marconi unit is in violation of, correct?

A I can't. What I can point to in 393 or 601 is a section that a loop provided with the Marconi solution would make that loop no longer compliant with 393, yes. I cannot point to a section of 601 or 393 that the Marconi solution, in a vacuum, is not in compliance with.

Q Okay. Have you relayed this information to Marconi, that you believe that his, her, whatever -- its -- DISC*S digital loop carrier system is in non-compliance with TR 393?

A That was the point of the testing. Again, you're trying to extend 393 to digital loop carrier systems, which it does not cover.

Q Okay.

A It has no -- it does not cover digital loop carrier systems. The point where it becomes relevant is a loop derived with this digital loop carrier system.

Q But as a matter of fact, all of those slots in that DISC*S system from Marconi will support ISDN, basic